

# Pneumonia

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## **What is pneumonia?**

Pneumonia is a 'catch-all' term for an infection of the lung. This is a very old term - in reality, pneumonia is a collection of diseases that may be caused by viruses, bacteria, and even fungi.

In general, pneumonia is more likely to occur during winter months. This is because respiratory illnesses caused by viruses increase in the winter, and they can directly cause a viral pneumonia or damage the airways and allow a bacterial pneumonia to develop.

## **Who gets pneumonia?**

Pneumonia is a very common illness, and any person can develop it. People at higher risk include the elderly, the very young, and those with underlying health problems, such as chronic obstructive pulmonary disease (COPD), diabetes, congestive heart failure, sickle cell anemia, or conditions that impair the immune system, such as AIDS, cancer therapy, or organ transplantation. Pneumonia may also be more likely following some kinds of lung injury - for example, after lungs have been damaged from breathing in chemicals.

## **What causes pneumonia?**

Some organisms (germs) that cause pneumonia may be spread through the air, by direct contact with an infected person, or on contaminated objects. Some causes of pneumonia can be from environmental sources and are spread in dust or other fine particles (e.g., water vapor). Some lung infections are not due to person-to-person transmission - for example, a person who loses control of breathing (e.g., during a seizure or while intoxicated) could vomit and then inhale stomach contents and bacteria into the lungs and develop pneumonia.

## **What are the signs and symptoms of pneumonia?**

Signs and symptoms of pneumonia may include cough (usually with sputum/phlegm), fever, shaking chills, shortness of breath, chest pain, muscle aches, loss of appetite, rapid breathing, and a rapid pulse. A physical exam and tests [chest x-ray, sputum and/or blood test, influenza test, etc.] may help healthcare providers make a diagnosis of pneumonia.

## **How soon after exposure do symptoms appear?**

Pneumonia symptoms may appear days to weeks (even years) after exposure, depending on the organism that causes the disease.

## **For how long can an infected person transmit pneumonia?**

Most people who are exposed to the germs that can cause pneumonia either do not become ill or develop only mild respiratory illness; fewer experience pneumonia. How long a person can spread a respiratory germ to someone else varies by the type of organism and the treatment that the person receives.

## **Do people with pneumonia need to be excluded from work or school?**

People with most kinds of pneumonia should rest, drink plenty of fluids, and take medications as directed by their doctor, but may return to work or school when they feel able. For some causes of pneumonia (e.g., influenza, tuberculosis) individuals may need to be isolated until they are no longer contagious. People with pneumonia should consult their doctor for guidance.

### **What is the treatment for pneumonia?**

For most types of viral pneumonia, patients usually heal on their own. However, it can be hard for a doctor to determine if the pneumonia is caused by bacteria or a virus, and therefore antibiotics are often used. Mild cases of pneumonia can often be treated with oral antibiotics, rest, pain/fever medication, and fluids. Severe pneumonia may require hospitalization to provide fluids, intravenous (IV) antibiotics and other medications, breathing treatments, oxygen, or even ventilator support, as well as help in managing any underlying health problems (e.g., diabetes, COPD). Sometimes pneumonia leads to death; risk of death depends on the organism causing the pneumonia, treatment received, and the person's underlying health status.

### **How can pneumonia be prevented?**

Actions that may be taken to prevent pneumonia include:

- Covering your cough and washing your hands or using alcohol-based hand sanitizer to reduce the spread of organisms that can cause illness. This is called practicing good respiratory etiquette.
- Staying home from work/school when ill
- Receiving all the recommended vaccines (e.g., influenza, pneumococcal, *H. influenzae* type b, measles, varicella/chickenpox)
- Following doctors' recommendations to most effectively manage health conditions (e.g., asthma, diabetes, HIV, emphysema, etc.)
- Avoiding tobacco smoke and excess alcohol use, both of which can decrease resistance to infection
- Practicing good dental hygiene (severe gum disease may increase the risk of pneumonia)

If you believe that you have pneumonia, see a healthcare professional.